

REMARKS/ARGUMENTS

In the Office Action mailed July 31, 2008, claims 1-15 were rejected. In response, Applicants hereby request reconsideration of the application in view of the amendments and the below-provided remarks.

For reference, claims 1-4 and 6-14 are amended to correct antecedent bases and to clarify the language of the claims. These amendments are supported, for example, by the original language of the claims.

Claim Rejections under 35 U.S.C. 112, second paragraph

Claims 3, 10, 13, and 14 were rejected under 35 U.S.C. 112, second paragraph. Specifically, the Office Action states that the limitation “said first and second blur filter units” of claim 3 lacks antecedent basis. Similarly, the Office Action states that the limitation “said first and second blur filtering” of claims 10, 13, and 14 lacks antecedent basis. Applicants appreciate the Examiner’s review of the language of the claims. Applicants submit that the claims are amended to address the issue of antecedent basis. In particular claim 3 is amended to refer to “a first one-dimensional blur filter unit and a second one-dimensional blur filter unit.” Similarly, claims 10, 13, and 14, are amended to refer to “a first one-dimensional blur filtering, and a second one-dimensional blur filtering.” Accordingly, Applicants respectfully requests that the rejection under 35 U.S.C. 112, second paragraph, be withdrawn.

Claim Rejections under 35 U.S.C. 102 and 103

Claims 1, 2, 7, 8, 9, 14, and 15 were rejected under 35 U.S.C. 102(e) as being anticipated by Leather et al. (U.S. Pat. No. 6,999,100, hereinafter Leather). Additionally, claims 3-6 and 10-13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Leather and further in view of Kaufman et al. (U.S. Pat. No. 6,674,430, hereinafter Kaufman). However, Applicants respectfully submit that these claims are patentable over Leather and Kaufman for the reasons provided below.

Independent Claim 1

Claim 1 recites “a texture space rasterizer for rasterizing a primitive in texture space” (emphasis added).

In contrast, Leather does not disclose all of the limitations of the claims because Leather does not disclose rasterizing a primitive in texture space. Instead the transform unit of Leather transforms incoming geometry directly from object space to screen space. Leather, column 12, lines 16-17. Furthermore, while the lines of Leather cited in the Office Action (Leather, column 17, lines 5-6) describe texture coordinate rasterization, generally, there is no mention of rasterizing a primitive in texture space. Moreover, the mere reference to texture coordinate rasterization, generally, is insufficient to specifically disclose rasterizing a primitive in texture space. Therefore, Leather does not disclose rasterizing a primitive image in texture space.

For the reasons presented above, Leather does not disclose all of the limitations of the claim because Leather does not disclose a texture space rasterizer for rasterizing a primitive in texture space, as recited in the claim. Accordingly, Applicants respectfully assert claim 1 is patentable over Leather because Leather does not disclose all of the limitations of the claim.

Independent Claim 8

Applicants respectfully assert independent claim 8 is patentable over Leather at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 8 recites “rasterizing a primitive in texture space.”

Here, although the language of claim 8 differs from the language of claim 1, and the scope of claim 8 should be interpreted independently of claim 1, Applicants respectfully assert that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 8. Accordingly, Applicants respectfully assert claim 8 is patentable over Leather because Leather does not disclose rasterizing a primitive in texture space.

Dependent Claims

Claims 2-7 and 9-15 depend from and incorporate all of the limitations of the corresponding independent claims 1 and 8. Applicants respectfully assert claims 2-7 and 9-15 are allowable based on allowable base claims. Additionally, each of claims 2-7 and 9-15 may be allowable for further reasons, as described below.

In regard to claim 2, Applicants respectfully submit that claim 2 is patentable over Leather because Leather does not disclose all of the limitations of the claim. Claim 2 recites “wherein said first one-dimensional blur filter unit is arranged before said first pass screen space resampler and said second one-dimensional blur filter unit is arranged before said second pass screen space resampler” (emphasis added). Hence, the claim recites separate components arranged in a specific order. In contrast, Leather does not disclose separate components arranged in a specific order. Leather merely discloses an operation that acts as a low-pass filter stage as well as a resampler that resamples at the resolution of the display. Leather, column 21, lines 34-35. Therefore, Leather does not disclose all of the limitations of the claim because Leather does not disclose separate components arranged in a specific order, as recited in the claim. Accordingly, Applicants respectfully assert that claim 2 is patentable over Leather.

In regard to claim 3, Applicants respectfully submit that claim 3 is patentable over the combination of Leather and Kaufman because the combination of cited references does not teach all of the limitations of the claim. Claim 3 recites “a first one-dimensional blur filter unit and a second one-dimensional blur filter unit, wherein said first and second blur filter units are one-dimensional blur filters having footprints with a size depending on a corresponding shear factor” (emphasis added). The Examiner acknowledges that Leather fails to teach the first and second blur units are one-dimensional blur filters having footprints with a size depending on a corresponding shear factor. Hence, the Examiner asserts that Kaufman purportedly teaches the indicated limitation. In particular, the Examiner asserts that by simply using shear transformations, the filters have footprints with a size depending on a corresponding shear factor. While Kaufman does use shear transformations, Kaufman does not teach basing footprints of one-dimensional blur filters on a corresponding shear factor. Therefore, Kaufman does not teach first and second one-dimensional blur filter unit which are one-dimensional blur

filters having footprints with a size depending on a corresponding shear factor, as set forth in the claim language. Accordingly, Applicants respectfully assert that claim 3 is patentable over the combination of cited references.

In regard to claim 6, Applicants respectfully submit that claim 6 is patentable over the combination of Leather and Kaufman because the combination of cited references does not teach all of the limitations of the claim. Claim 6 recites “said first and second blur filter units are box low pass filters having a footprint determined by the shear factor” (emphasis added). In particular, Examiner asserts that by simply using shear transformations, the filters have footprints with a size depending on a corresponding shear factor. While Kaufman does use shear transformations, there is no teaching of basing footprints of one-dimensional blur filters on a corresponding shear factor. Therefore, Kaufman does not teach first and second one-dimensional blur filter unit which are one-dimensional blur filters having footprints with a size depending on a corresponding shear factor, as set forth in the claim language. Accordingly, Applicants respectfully assert that claim 6 is patentable over the combination of cited references.

In regard to claim 9, Applicants respectfully submit that claim 9 is patentable over Leather because Leather does not disclose all of the limitations of the claim. Amended claim 9 recites “wherein said first one-dimensional blur filtering is performed before said first pass screen space resampling and said second one-dimensional blur filtering is performed before said second pass screen space resampling” (emphasis added). For reasons similar to those of claim 2 above, Leather does not disclose this limitation. In particular, Leather does not disclose separate components arranged or performed in the specific order recited in the claim language. Leather merely discloses an operation that acts as a low-pass filter stage as well as a resampler that resamples at the resolution of the display. Leather, column 21, lines 34-35). Therefore, Leather does not disclose all of the limitations of the claim because Leather does not disclose separate components arranged or performed in the specific order recited in the claim language. Accordingly, Applicants respectfully assert that claim 9 is patentable over Leather.

In regard to claim 10, for reasons similar to those of claim 3 above, the combination of Leather and Kaufman does not teach all of the limitations of the claim. In particular, while Kaufman does use shear transformations, there is no teaching of basing

footprints of one-dimensional blur filters on a corresponding shear factor. Therefore, Kaufman does not teach a first one-dimensional blur filtering and a second one-dimensional blur filtering which are performed based on one-dimensional blur filters having footprints with a size depending on a corresponding shear factor, as set forth in the claim language. Accordingly, Applicants respectfully assert that claim 10 is patentable over the combination of cited references.

In regard to claim 13, for reasons similar to those of claim 6 above, the combination of Leather and Kaufman does not teach all of the limitations of the claim. In particular, while Kaufman does use shear transformations, there is no teaching of basing footprints of one-dimensional blur filters on a corresponding shear factor. Therefore, Kaufman does not teach a first one-dimensional blur filter unit and a second one-dimensional blur filter unit which are one-dimensional blur filters having footprints with a size depending on a corresponding shear factor, as set forth in the claim language. Accordingly, Applicants respectfully assert that claim 13 is patentable over the combination of cited references.

CONCLUSION

Applicants respectfully request reconsideration of the claims in view of the amendments and remarks made herein. A notice of allowance is earnestly solicited.

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-4019** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **50-40194** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Respectfully submitted,

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